

OVERVIEW OF THE PROPOSED AIR MANAGEMENT REGULATION XIV
CONTROL OF PERCHLOROETHYLENE FROM DRY CLEANING FACILITIES
(APPROVED BY THE AIR POLLUTION CONTROL BOARD ON JUNE 24, 2010)

NOTE: The following document is a general overview summarizing the major requirements of proposed Air Management Regulation XIV: Control of Perchloroethylene from Dry Cleaning Facilities, adopted by the Air Pollution Control Board (APCB) on June 24, 2010. Interested parties should refer to the proposed Regulation text for specific conditions and requirements. The text of the proposed Regulation is subject to change and may not accurately reflect the provisions included in any final Regulation that is adopted.

WHO IS AFFECTED BY THE PROPOSED REGULATION

Dry cleaners that use dry cleaning solvents containing **Perchloroethylene (“PERC”)** [also known as **DowPer™**, **PerSec®**, **Perklone™ D**, **Perklone™ DX**, **Tetrachloroethylene**, or **Tetrachloroethene**], or **n-Propyl Bromide (“n-PB”)** [also known as **Dry-Solv™** and **Fabrisolv™**].

GENERAL RESTRICTIONS ON PERC AND n-PB DRY CLEANING

- Use of any dry cleaning solvent containing n-PB (such as Dry-Solv™ and Fabrisolv™) is **banned**.
- Use of any dry cleaning solvent containing PERC at co-located dry cleaning establishments (e.g. sharing a wall, ceiling, or floor with any commercial, industrial, residential, healthcare, or educational facilities) is to be phased out by **December 31, 2013**. Dry cleaning establishments that are co-located to commercial or industrial facilities may apply for an exemption to the phase out. Stand-alone cleaning establishments are not affected.
- **Use of second and third generation dry cleaning machines to be phased out within two years.** (Dry Cleaners that have the potential to emit more than 10 tons of PERC into the air, or consume 8,000 Liters or more of PERC per year, must upgrade to fifth generation dry cleaning machines or better.)

ACTIVITIES THAT ARE PROHIBITED BY THE PROPOSED REGULATION

- Installation / modification of PERC dry cleaning machines and associated equipment without a permit from Air Management Services (AMS). Dry cleaners must apply for an installation permit for existing dry cleaning machines and associated equipment within six months of the regulation’s effective date. Installation permits must otherwise be obtained before any new dry cleaning machines and equipment can be installed, or such existing machines and equipment can be modified.
- Operation of any PERC dry cleaning machines and associated equipment without an operating license from AMS. Once an installation permit is granted, dry cleaners must apply for an annual license to operate such machines and equipment.
- Use of PERC dry cleaning machines to perform only washing or only drying. (This requirement effectively prohibits the use of first generation dry cleaning machines)
- Provision of self-service PERC dry cleaning machines for use by the general public.
- Use of immersion heaters to evaporate PERC from wastewater.
- Venting PERC exhaust emissions from dry cleaning machines and associated equipment directly into the dry cleaning establishment or into any commercial, residential, healthcare, or educational facilities adjacent to the establishment.
- Discharge of PERC contaminated waste (including untreated wastewater, still bottoms / sludge residues, filter media, dirt, lint, soils, or other deposits or residues from the dry cleaning process) into the public sewer system.

PROPOSED OPERATIONAL REQUIREMENTS FOR ALL PERC DRY CLEANERS

- **PERC Spill Cleanup** - sorbent materials, or equivalent, must be used to clean up PERC spills. A PERC vapor proof container labeled "FOR SPILL CONTAINMENT ONLY" must store wet sorbent materials when spills occur. All PERC spills and releases (including fires or explosions) must be reported immediately to AMS and appropriate emergency response agencies.
- **Operation of Refrigerated Condensers** - temperature of refrigerated condenser exhaust stream must be less than or equal to 45 degrees Fahrenheit. The steam and condensing coils and machine must be kept free of lint and other buildup.
- **Draining Cartridge Filters** - must be drained inside the dry cleaning machine for a minimum of 24 hours (48 hour minimum for adsorptive cartridge filters) before disposal.
- **Replacement of Door Gaskets on Dry Cleaning Machines** - must be replaced every two years.
- **Treatment of PERC Contaminated Waste Water** - use of a water separator and double carbon filtration (or equivalent) to treat wastewater before it is discharged to the public sewer. The PERC concentration in the wastewater discharged to the public sewer must be less than or equal to 20 ppb. (Note, evaporation of PERC from waste water is prohibited)
- **Storage of PERC Contaminated Wastes (Including Spent Cartridges)** - must be kept in properly labeled and tightly sealed containers.
- **PERC Leak Detection Checks** - weekly inspections of dry cleaning equipment with an approved PERC sampling meter. Inspections must be conducted while the dry cleaning equipment is operating.
- **Repairs of PERC Dry Cleaning Machines / Equipment** - all leaks must be repaired within 24 hours of detection unless parts are unavailable. If the part needed is unavailable, the leaking component must be tagged or marked. The necessary parts must be ordered within two working days and the repair must be made within five working days of its receipt. If leaking dry cleaning equipment is not repaired within 15 working days, it must be deactivated until repairs are completed.
- **Recordkeeping** - records of regular maintenance, leak repairs, solvent and load use, inspections, proper aisle space, supply of spare parts, quarterly air sampling, and PERC waste disposal shipments, must be retained onsite for a minimum of five years.

PROPOSED ADDITIONAL REQUIREMENTS FOR CO-LOCATED PERC DRY CLEANING ESTABLISHMENTS (Within one year of the effective date of this regulation)

- **Exhaust Buffer Requirement** - exhaust vents must be a minimum of 25 feet away from any window, door, or air intake.
- **Ventilation / Isolation Requirements** - rooms containing the dry cleaning machines and associated equipment must be sealed off from the rest of the establishment by vapor barriers and be equipped with a separate exhaust system. In the alternative, Dry Cleaners may choose to install a ventilation system that produces one air change every five minutes and maintains negative air pressure for the entire facility.
- **Air Sampling of Co-Commercial Sites** - dry cleaning facilities must obtain a twenty-four hour air sample from any co-located commercial site once every 3 months. If the PERC concentration in the sample is greater than 40 ppb, but below 200 ppb, corrective action must be taken within 30 days. If the concentration is above 200 ppb, all PERC dry cleaning operations must cease immediately.

FOR MORE INFORMATION

- Further information, including a copy of the proposed regulation, expert reports considered by the APCB and minutes of APCB meetings can be found at the AMS web site at:
<http://www.phila.gov/health/AirManagement/index.html>
- If you have trouble accessing the files on the website or if you have additional questions, please contact AMS at 215-685-7580.